1. Question: Please provide specifications for the Chilled Water Pumps and High Temperature Chilled Water Pumps scheduled on M-002.

Response: Specification Section 23 64 26 was provided under IFB Amendment on August 14, 2012.

2. Question: Plan M-007 has the schedule for Steam Condensate Return Pumps and note 3 refers to Johnson Control Metasys. Is the intent to utilize Johnson Controls as the provider for the DDC system?

Response: Disregard reference(s) to Johnson Controls Metasys for the new UCS. The new UCS shall be a BACNET compatible system, as variously indicated elsewhere in the plans and specifications.

3. Question: On drawing M-401 detail #4 to the left of column 9 and above row A is the designation 036-HEX002. This piece of equipment is not shown in schedule. Please advise.

Response: The unit tag 036-HEX002 should read 036-HWC001.

4. Question: On drawing M-401, Detail #4 to the right of column 8 and below row A.5 is a designation the 036-STA001. This piece of equipment is not shown in schedule. Please advise.

Response: The STA is the steam pressure reducing station, a combination pipes and valves assembly. Please see details # 1 &2 on M-506. There is no STA schedules, only reducing valves were scheduled.

5. Question: Will this project require building inspections from the local building department?

Response: There will be no inspections by local Government. NASA has its own Construction Quality Assurance Inspectors.

6. *Question:* What is the anticipated project award date?

Response: The anticipated contract award date is on or before September 21, 2012.

7. Question: In Specification 01 50 00 Section 3.5, please elaborate the requirements of "Computer station, and working communication facilities" to be provide in the Resident Engineer's office and Government Trailer.

Response: There are no requirements for computers or phones to be provided.

8. Question: Are there any telephone/internet providers in Goddard Space Flight Center campus that contractors could utilize to get service for the Temporary Construction facilities?

Response: Construction contractor is responsible for contracting for telephone /internet service through any independent provider of their choice. NASA/GSFC will work with the provider to ensure a pathway/cabling to service to the temporary construction facility.

9. Question: Can the Resident Engineer office be a portion of the Government Trailer if the floor area requirements are met?

Response: Yes. The Resident Engineer's office can be a portion of the government Trailer. NASA intends to revise and clarify the Government Trailer specification through an IFB Amendment on or about August 20, 2012.

10. Question: Are the contractors required to complete any section of the new parking lot for early occupancy?

Response: No. Contractors will not be required to complete any section of the new parking lot early.

11. Question: From the Building Information Modeling specification it appears the contractor has to incorporate any and all changes to the design from change orders, RFI's, CCD/PCI, etc. Can you confirm the design team is not updating the design model and reissuing if they direct a change to the design?

Response: Confirmed. Updated models will not be provided with design changes. The contractor shall provide a Record BIM as indicated in the "BUILDING INFORMATION MODELING SCOPE OF SERVICES AND REQUIREMENTS FOR CONSTRUCTION CONTRACTOR IN A DESIGNBID-BUILD PROCESS Final Version March 16, 2011" paragraph 2.7.

12. Question: In Building Information Modeling specification, one of the paragraph under Section 1.3 states "Unless BIM software is being provided by NASA, Contractor must". Please clarify if NASA is providing BIM Software.

Response: NASA will not be providing BIM software to the contractor.

13. Question: Telecommunication Drawings of the riser diagram for the ISP backbone cabling and the details for patch-panels, racks, wire management system at each telecom room and the ISP id numbering system for the voice/data ports, have not been included. Please clarify.

Response: Telecommunications cabling and infrastructure system are by NASA and not part of this contract.

14. Question: Will there be additional specification sections for Division 27 00 00 that address the ISP infrastructure materials and execution? Where do the telecommunication contractors tie the buildings ISP-copper-service entrance cable into the OSP campus distributor? Please provide a detail of the OSP & ISP connections.

Response: Communications and telephone cabling and infrastructure components are by NASA. No Online Service Provider (OSP) or Internet Service Provider (ISP) cabling and connections are included under this contract.

15. Question: Will the card reader access system be a fully functioning system installed by a contractor? If not, will the owner be completing the system at a later date? Please clarify the intent of the card reader installation there are no specifications to refer to for understanding the required devices/materials that will be compatible with the campus security systems.

Response: This project will install only the rough-ins for the card reader access system as indicated in the contract drawings. Card readers, cabling and other related components are provided by NASA and will be installed at a later date under a separate contract.

16. Question: Dwg E201B – In storage room N117 there is symbol of a rectangle with no annotation of its purpose. Please clarify.

Response: Disregard the rectangle in Room N117 does not represent anything.

17. Question: Dwg E201B – In production room N130J there are two device symbols shown for circuits 30 & 34 of panel 036-PPL1D4A. These two devices are 20 amp branch circuits but do not indicate if they are receptacles or junction points. The legend for wiring devices has no symbols supporting these two shown. Please clarify.

Response: The symbol stands for "SPECIAL RECEPTACLE WITH NEMA CONFIGURATION TO MATCH EQUIPMENT."

18. Question: Dwg E102B – in vending room C108 the electric water cooler is shown with a GFCI receptacle as its point of connection to power. Should this not be a single duplex receptacle without a GFCI requirement? The EWC compressor will cause the GFCI to trip and from the looks of the EWC shown (two tier handicap the receptacle will be encased behind the EWC and not accessible to be reset. Please clarify.

Response: Please include as specified. The GFCI will not trip if the EWC is in proper working order.

19. Question: Drawing A-102b shows a fire extinguisher cabinet (F.E.C) near Column line 17 at Stair 2. The detail 5/A-701 does not show a F.E.C at this location. Are we to provide one at this location?

Response: There is no FEC at this location. Please refer to the LS drawings and floor plan keynote no. 10 for FE and FEC locations.

20. Question: On Page A-102a, Room N207 shows a symbol for Floor Plan Keynote 15, but there is no keynote 15 on the Legend. Please advise.

Response: The keynote in Room N207 is no. 2.

21. Question; On Page A-102a, Room N241 seems to show a symbol for Floor Plan Keynote 14 overlapped with another Keynote 1, but there is no keynote 14 on the Legend. Similarly, a symbol for Keynote 14 is shown on A-102b in Room C202, but this note is not on this page as well. Please advise.

Response: The key note in Room N241 is no. 1. The key note in Room C202 is no. 1.

22. Question: Please confirm that the General Contractors need to self-perform 15% of the work. This is noted in the Special Contract Conditions, I.74.

Response: Confirmed. In accordance with "I.74 52.236-1 PERFORMANCE OF WORK BY THE CONTRACTOR (APR 1984), The Contractor shall perform on the site, and with its own organization, work equivalent to at least 15% (fifteen percent) percent of the total amount of work to be performed under the contract."

23. Question regarding quantity of Bike Racks. Please Clarify:
Drawing L-201 show 12 Bike Racks
Drawing L-502 Schedule requires only 5 Bike Racks

Response: Please refer to the L-201 sheet which indicates 12 bike racks. The requirement is for 12 bike racks, please disregard the discrepancy between the plan and schedule.

24. Question; In reference to section 26 (Electrical); the Variable Frequency Drives (VFDs), what are the appropriate Harmonic requirements for the project?

Response: Harmonic requirements for the VFDs are found in spec section 26.29.23.21

25. Question: Division 27 does not have a specification for the Low Voltage Communication Cabling or any Outside Plant Telecommunication Cabling? Please confirm that these portions of the project are excluded from this bid package.

Response: Yes, confirmed. No communications cabling in this contract. There is however, communication rough-in work as shown on the drawings.

26. Question: We see in for Division 14 there is an elevator. Could you tell me, is it a LULA Elevator – Limited Use, Limited Application, type elevator?

Response: Please review the Division. 14 specification. This is not a LULA and the specifications do not indicate that it is.

27. Question: Sheet A-313, the glass at the glass overhang bid additive #1, at roof line on the North elevation is GL4 and on the South elevation it is LGU1. What type of glass is LGU1 or GL4? They are not listed in the glass Tspecification 088100. Is it supposed to be two different types of glass?

Response: The glass is LGU1 for both the north and south elevations.

28. Question: Sheet A-412 glass types: Glass type IGU2 says acid etched #1 & #2 surfaces but the specifications say Solarban 70XL #2 surface and acid etched #3 surface.

Response: Please refer to the Glazing Unit Types on A-412, IGU2.

29. Question: Glass type IGU3 specifies acid etched #2 surface but the specifications specify Solarban 70XL #2 surface with no mention of acid etched. Is this glass acid etched?

Response: Please refer to the Glazing Unit Types on A-412, IGU3.

30. Question: Sheet A412 glass types - Glass type IGU2 says acid etched #1 & #2 surfaces but the specifications say Solarban 70XL #2 surface and acid etched #3 surface. Please clarify.

Response: Please refer to the Glazing Unit Types on A-412, IGU2.

31. Question: Glass type IGU3 says acid etched #2 surface but the specifications say Solarban 70XL #2 surface with no mention of acid etched. Is this glass acid etched.

Response: Please refer to the Glazing Unit Types on A-412, IGU2.

- 32. Question: We submit the following requests for clarification for the above referenced project:
- 1) Specification 23 07 00, 2.3.2 indicates mineral fiber insulation is acceptable for above ground hot water piping. Section 3.2.1.5 (Table 1) specifies cellular glass insulation for both heating hot water and domestic hot water piping. Table 2 specifies cellular glass for heating water and mineral fiber for domestic hot water. Please clarify where the use of mineral fiber is desired/acceptable.

Response: The cellular glass insulation is used for the steam pipes and steam equipment, including the shell & tube heat exchanger HWC001. The fiber glass insulation is used for all heating water pipes (HWS/R & LHWS/R) and chilled water pipes (CHWS/R & HTCHWS/R).

2) Section 07 52 00 - Modified Bituminous Membrane Roofing, page 7, 1.2 states that the roof membrane is to be torch applied, but further references SBS modified bitumen hot applied asphalt system. Is an SBS hot applied granular surfaced modified bitumen roof system acceptable in lieu of the APP torch applied system? Warranty requirements can be met using the hot applied system.

Response: Assuming the warranty requirements can be met, this would be acceptable.

33. Question: Please provide a detail showing the acceptable method for grounding the cable tray system. Specification 27 05 28 36 40-Art. 3.3 indicate a continuous aluminum conductor no smaller than a 3/0 cable. Can the cable be a braided bare conductor or an insulated conductor? What type high strength bolts will be acceptable? Please also provide the cable tray depth and width.

Response: Cable tray system shall be connected to the building ground at the telecommunications ground bar shown on the telecom sheets. The 3/0 aluminum conductor may be either a braided or insulated conductor. Connection to the copper ground bar shall be made with connectors suitable for the purpose. High strength bolts shall be bolts identified by the cable tray manufacturer as suitable for cable tray bonding. Cable tray shall be depth: 4", Width: 18" and Rung Spacing: 9".

Division 33 – Utilities, 33 63 13 Exterior Underground Steam Distribution System.

Based on multiple questions regarding the Division 33 – Utilities, 33 63 13 Exterior Underground Steam Distribution System, the Government has reviewed the specification and made multiple modifications to this section. As a result, a revised Section 33 63 13 specification will be issued as an IFB Amendment on or before August 20, 2012.

[End of Questions/Responses]